STREAM CORRIDOR PROTECTION IN THE ATLANTA REGION THE METROPOLITAN RIVER PROTECTION ACT AND THE CHATTAHOOCHEE CORRIDOR PLAN

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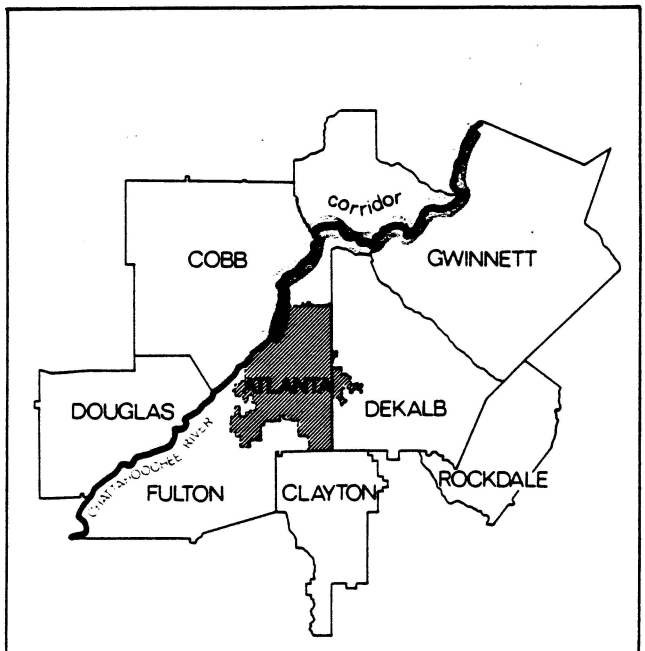
INTRODUCTION

The Chattahoochee River is the largest stream in the seven-county Atlanta Region and is the source of 70 percent of the Region's drinking water. The scarcity of available groundwater resources has led to this dependence on the river as a water supply.

In addition to its importance as a water source, the Chattahoochee is also a major recreation area for the Atlanta Region. The Chattahoochee River National Recreation Area (CRNRA), established by Congress in 1978, is made up of a series of parks along the river that attract 1.6 million visitors annually. The Chattahoochee Nature Center, a preserve and education center, as well as Fulton and Gwinnett county parks, provide further recreational opportunities along the river. Rafting, boating, fishing, jogging and hiking are the most common activities in and along the river. The river above Atlanta is clean enough and, since the construction of Buford Dam, cold enough to support a trout fishery. It is one of the southernmost trout streams in the southeast.



The Chattahoochee Corridor

The Chattahoochee River has become both a valuable water source and a recreational resource for the Atlanta Region. It is also surrounded by the fastest-growing areas of that Region.

Above Atlanta, the Chattahoochee River and its immediate environs downstream of Buford Dam historically had been subjected to minimal development. Except for agriculture in the bottom lands, river crossings and the construction of Morgan Falls Dam in 1908, the river remained relatively undeveloped. The natural system of land and vegetation has helped to maintain the high water quality of the river by controlling pollutants, allowing water table recharge, allowing flood storage and passage, as well as providing erosion and sediment control.

THE NEED FOR PROTECTION

The undisturbed soil, vegetation and layers of plant material that have accumulated over the years act as a sponge, absorbing stormwater into the ground and slowly releasing it into surface waters. Water that isn't absorbed is slowed by the varied terrain and thick vegetation. Both soil and vegetation aid in filtering out contaminants in stormwater before it reaches the river.

Plant roots and natural mulch help hold the soil in place. Along streams, this network protects the streambanks from the erosive force of the flowing water. Streambank vegetation also provides shade for temperature control and cover for aquatic habitats. The system of land, river and vegetation works together to maintain stability. However, development and urbanization disrupt and overload the system's ability to control stormwater runoff and pollutants. Urbanization destroys the natural system by removing vegetation, grading and clearing the land, as well as covering the ground with paving and structures. This reduces the amount of rainfall that is absorbed or slowed by the ground and vegetation. More water flows faster across the land, increasing soil erosion. Sediment fills streams, aquatic life is smothered and flooding increases. Cleared streambanks contribute to bank erosion and collapse, as well as higher water temperatures and loss of aquatic habitat.

Urbanization introduces the concentrated pollutants in runoff from roads, parking lots, landscaped areas and lawns. The pollutants can range from oil, gas and rubber to fertilizers and pesticides. In addition, runoff temperatures increase by flowing over hot, exposed surfaces. With no filtering from the original land-vegetation system, the contaminated runoff flows directly into the river. Sewer line and septic tank seepage near the river can reach surface waters adding to the contamination problem.

In addition, development in floodplains uses up space that once could hold floodwater. During floods, the loss of

storage space will force the water higher, damaging the new development and worsening floods.

By the late 1960's, suburban development began to reach the Chattahoochee River north of Atlanta. The new construction raised concern over the long term health of the river, as urbanization threatened to destroy the natural system of land and vegetation that had helped preserve the river.

THE METROPOLITAN RIVER PROTECTION ACT

Out of this concern, the Metropolitan River Protection Act was enacted in 1973 by the Georgia General Assembly. The Metropolitan River Protection Act (Georgia Code Section 12-5-440 et seq.) is a state law which provides for the protection of water supply rivers in regions with more than 1,000,000 population. The law, as applied to the Atlanta Region, establishes a river protection corridor within 2,000 feet of either bank of the Chattahoochee River and its impoundments between Buford Dam and Peachtree Creek, a distance of 48 miles. The streambed and any islands in the watercourse are included.

The Act required the Atlanta Regional Commission (ARC) to adopt a Plan that would protect the land and water resources of the Chattahoochee River Corridor as well as procedures to implement the Plan and the Act. Under the terms of the Act, it became illegal for any person to engage in any land-disturbing activity within the Corridor not in compliance with or not certified under the Chattahoochee Corridor Plan.

The Chattahoochee Corridor Plan

The Chattahoochee Corridor Plan was adopted by the Atlanta Regional Commission (ARC) as required by the Metropolitan River Protection Act. The Plan is based upon ARC's 1972 Chattahoochee Corridor Study which first proposed a plan for protecting the River Corridor. The Plan includes three sets of specific standards: Vulnerability Standards, Buffer Zone Standards and Floodplain standards. As development in the Corridor was viewed as inevitable, the Plan included development principles and standards to minimize the negative effects of development on the river. The characteristics of the existing terrain, soils and vegetation were used as a means to guide development towards less sensitive areas. Six natural characteristics of land were used in ranking the land's sensitivity: vegetation, geology, soil erodibility, hydrology, slope and aspect. Each characteristic was ranked and a composite of all rankings was developed for all land in the Corridor. The ranked land was divided into six vulnerability categories. Maximum limits on land disturbance and impervious surface were established for each category, with the limits growing more restrictive as vulnerability increased.

Land disturbance is defined as any activity disturbing the land or existing vegetation. Impervious surface means any paved, hardened or structured surface, such as building, driveways, decks, pools, etc. The limits are stated as percentages of the area of a category.

Buffer Zone Standards include a 50-foot undisturbed vegetative buffer along the banks of the river and its impoundments and a 35-foot buffer along the banks of other flowing streams in the Corridor. Within 150-feet of the river and its impoundments, the Plan generally prohibits any structures or impervious surfaces. Only limited exceptions such as footpaths, bridges and water intakes are allowed. The buffer zone standards provide a last defense for the river against sediment, runoff, erosion and pollutants.

The Floodplain Standards require that any fill in the river's 100-year floodplain must be balanced by the removal of an equal amount of soil to maintain flood storage volume. The floodplain standards require that floodflows not be blocked and, within the standard project (500-year) floodplain, that no structure be more than 35 feet above the existing grade.

Implementation

All development, clearing or other land-disturbing activity in the Corridor must be approved and certified under the terms of the Metropolitan River Protection Act and the Chattahoochee Corridor Plan. The responsibilities for implementing the Act and the Plan are divided between the Atlanta Regional Commission and the local governments with land in the Corridor: the City of Atlanta; Cobb County; Fulton County; the City of Roswell; Gwinnett County; the City of Berkeley Lake; the City of Duluth; and the City of Suwanee. Forsyth County also has land in the Corridor. However, Forsyth County is outside the Atlanta Region and thus coordinates its activities with the Georgia Mountain APDC.

Review applications for Corridor projects are submitted to the appropriate local government, which then forwards the applications to the Atlanta Regional Commission (ARC). ARC reviews the data submitted to determine if the proposal is consistent with Plan Standards. When the determination of a project's consistency or inconsistency with the Plan is made, the finding is returned to the local government. The local government then issues a certificate authorizing the proposed activities if they conform to Plan Standards. The certificate is not necessarily a separate document. Each local government can choose its own means and wording for documenting the certification of the application.

Once a project has been certified, the local government has the continuing responsibility to monitor development to make certain that it conforms to the terms of the certificate. The Act does not specify monitoring procedures. Local governments include monitoring as part of their site development and building inspection programs. The local government also has the responsibility to monitor all its Corridor land to be sure that no land-disturbing activity occurs without review and authorization.

Any activity that occurs without certification or violates the terms of an approved certificate is a violation of the Act. Even if the activity conforms to Plan Standards, it is a violation if it does not have an approved certificate. This holds true for all activities, even additions to existing development. The local government has the authority and the responsibility to enforce the law and will take action against violators. The Act allows penalties up to $1,000 per acre per day.

It is the responsibility of the Atlanta Regional Commission (ARC) to monitor the enforcement activities of the local governments. The Atlanta Regional Commission responds to reports of apparent violations and conducts periodic monitoring trips throughout the Corridor. All apparent violations are reported to the appropriate local government, with a response required by the Act. If a local government does not enforce the Act under the Plan, ARC can report the matter to Georgia EPD for further enforcement.

The Plan has remained essentially the same since its adoption in 1973 despite clarifications and modifications. The Plan has provided a mechanism for permitting development within the natural framework of the Corridor.

CONCLUSIONS

Overall implementation of the Plan has been successful. No studies quantifying reductions in impervious surface coverage and land-disturbance have been made. However, comparisons of Corridor projects--particularly office parks and apartment complexes--with non-Corridor or pre-Act projects appear to indicate that such reductions have occurred.

Problems with small violators have occurred and require increased monitoring and attention, but in general the plan is meeting its goals. It has achieved a balance that permits development while protecting the stability of the land and vegetation system vital to the maintenance of the land and water resources of the river.

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